
Food safety

Patient Information





Why is food hygiene important?

Good food safety is particularly important during and after cancer treatment as you may be at a higher risk of getting food poisoning. This is because many of the treatments used to treat cancer also cause temporary damage to the immune system. White blood cells, which usually fight infection in the blood, may be at a lower level than usual, making you more likely to become unwell if you come in contact with bacteria and other harmful microbes in food.

Overall in the UK, the rates of food poisoning are decreasing and some simple steps to further decrease the risk can help to keep you safe both at home and when eating out.

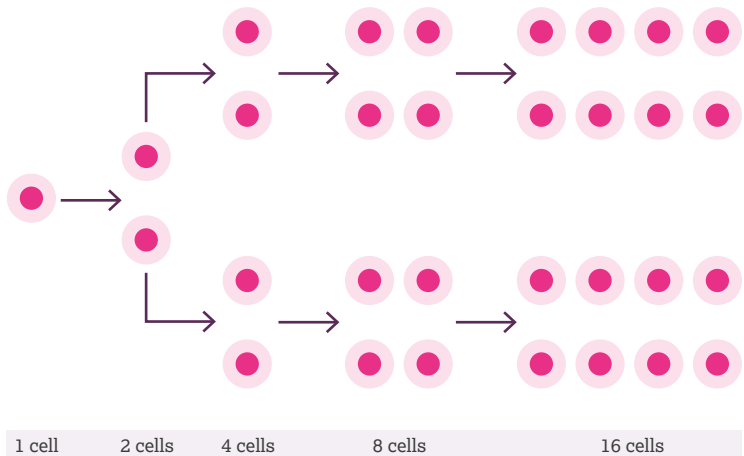
What is bacteria?

Bacteria are tiny single celled organisms that cannot usually be seen by humans even when they are present in very large numbers. Not all bacteria are harmful, in fact 'friendly bacteria' play an important role in both the human body and in the manufacturing of the food we eat. However, if we eat contaminated food with even small amounts of bacteria it can make us very unwell. Even 'friendly bacteria' may be harmful if you have a weakened immune system.

Food can be contaminated by bacteria at any point of its preparation or storage. As we cannot see the bacteria, we have no way of knowing if the food we buy is contaminated or not. Bacteria live all around us in water, soil, in the air, on and in animals and on our own hands, hair and bodies. This is why it is easy for food to become contaminated by mistake. In order to keep us safe, it is important that we understand the conditions in which bacteria will spread and multiply.

A single bacterium, given the right conditions will start to divide and multiply. This means that very quickly one becomes two, which both divide to make four and so on. Within a few hours, one bacterium contaminating a food can divide into millions of bacteria, enough to give us food poisoning.

Exponential growth



Harmful bacteria will only multiply if they have the ideal conditions to do so. This is why we have two approaches to food safety during and after cancer treatment.

- Limit the opportunity for food to become contaminated in the first place
- Limit the opportunity for bacteria in contaminated food to survive and multiply.

The conditions needed for bacteria to multiply are:

- Food/nutrients
- Warmth
- Moisture
- Time.

When storing and preparing food, if we can manage to reduce these conditions we will keep our food safer. Some foods will be naturally higher risk, such as some cold foods that are ready to eat and will not be cooked again, for example sandwiches. As we cannot remove the food source, we focus on the other conditions to keep us safe.

Are there any foods I should avoid?

Most foods, if stored, prepared and cooked correctly are safe to eat. However the foods below are very likely to contain harmful bacteria and we suggest that you avoid these:

- Unpasteurised dairy products including mould ripened and blue veined cheeses, such as brie, camembert or stilton
- Raw and runny eggs (fresh, well-cooked lion marked eggs are safe to eat)
- Sushi and sashimi
- Pâté
- Uncooked smoked fish and seafood
- Reheated rice (rice should always be prepared to eat straight away).

Which conditions encourage bacteria to grow?



Warmth

The ideal temperatures for bacteria to grow are between 5°C and 63°C. This is why any food kept at room temperature is a potential risk.

Most food kept in the fridge below 5°C will be kept safe while chilled. However, chilling food does not kill the bacteria and multiplication will start again once food is removed from the fridge.

Cooking to above 63°C will kill most bacteria. It is recommended that all cooked food reaches at least 70°C in the centre for a minimum of two minutes. A food probe thermometer can help you to monitor this.



Time

To avoid the risk of bacteria multiplying in food, it is best to prepare and eat meals within a reasonable amount of time (within 10–20 minutes). Buffets, salad bars, delis and barbecues can be particularly risky as food is often left at temperatures ideal for bacterial growth for long periods of time, and is often handled by multiple people.

Any food that needs to travel before you eat it, such as takeaways, should be piping hot when it arrives with you to ensure that it has been kept safe. This is why we recommend that friends and family do not bring in food for you while in hospital. Any food travelling into the hospital is provided with time for bacteria to grow, making a food that was safe to eat at home into an unsafe food.



Moisture

There are, however, some foods that are safe at room temperature for long periods of time. These are generally dry, cooked foods that do not provide bacteria with the moisture they need to grow. Foods that are high in salt or sugar will naturally draw away the moisture from the bacteria, making them less likely to multiply. These foods are safe for you to bring into hospital or to take out and about with you when you are away from home.

Examples include:

- breakfast cereals
- crisp breads
- crackers
- bread sticks
- crisps and baked savoury snacks
- packaged dried fruit, nuts and cereal bars
- cakes, bakery products (not fresh cream) and biscuits
- sweets or chocolates
- instant noodles, rice or couscous pots.

Please note

Fresh fruit and vegetables including salad are suitable for all. If you bring fresh fruit in to the hospital, we request that you wash this at home first. Bacteria can be present on the surface of fruit and it must be washed before eating. We do not have the facilities for patients or visitors to do this on the wards or in outpatient areas.



Top tips for food safety:



- Avoid the contamination of food by always washing and drying your hands before touching or eating anything. Never eat or touch your mouth or nose when preparing food.
- Cover any cuts or grazes before touching food.
- Do not allow raw and cooked foods to mix.
- Sanitise hands, chopping boards, knives, and utensils using hot water after touching raw meat, fish or vegetables.



- Store cooked food at the top of the fridge so that raw food cannot contaminate it.
- Always cover food to be stored to prevent contamination.
- Never overload your fridge or freezer – this can increase the temperature, making the food unsafe to eat.
- Defrost food in the fridge, not at room temperature.
- Be aware of shared utensils such as tongs at buffets, that may have been handled by many people and may have contaminated the food.



- When shopping, buy chilled and frozen food last to limit the time it is kept at warmer temperature.
- Avoid bruised fruit and vegetables or damaged packages and tins.
- Always check 'use by' and 'best before dates' before buying or eating food.



- Always keep pets from food preparation areas as they may carry bacteria even when well.
- If storing cooked food after cooking, allow it to cool at room temperature before placing in the fridge or freezer. Larger items should be decanted into smaller containers to allow them to cool quicker.
- Never refreeze thawed food.



- Avoid reheating rice and takeaway food as harmful bacteria can survive the heating process.
- When eating out you can check the food hygiene rating of restaurants and takeaways using the 'scores on the doors' website from the Food Standards Agency. This shows you the food safety rating of the restaurant – a score of 5 is the best and the restaurant will have excellent processes in place to keep you safe.

The Royal Marsden Macmillan Hotline: 020 8915 6899

You can ring the hotline 24 hours a day, 7 days a week.

Call us straight away if you are feeling unwell or are worried about the side effects of cancer treatments.

This service provides specialist advice and support to all Royal Marsden patients, as well as to their carers, and both hospital and community-based doctors and nurses caring for Royal Marsden patients.



Notes and questions

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Revised January 2024

Planned review January 2027

This booklet is evidence based wherever the appropriate evidence is available, and represents an accumulation of expert opinion and professional interpretation.

Details of the references used in writing this booklet are available on request from:

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No conflicts of interest were declared in the production of this booklet.

The information in this booklet is correct at the time of going to print.

Should you require information in an alternative format, please contact The Royal Marsden Help Centre.

RS-1749-03

The patient information service is generously supported by The Royal Marsden Cancer Charity.

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Registered Charity No.1095197



If you are struggling with any aspect of your eating and drinking or if you have any further queries, please contact your Clinical Nurse Specialist or Dietitian.

Further information and ideas for nutritious meals and snacks can be found in The Royal Marsden booklet *Eating well when you have cancer* or the CCLG booklet *Helping your child to eat well during cancer treatment*.



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